



**Available in single- or ganged multiple-bay configurations, the PAP and Mylar-version Stac64™ connectors support unsealed transportation applications with shorter lead-times and optimum design flexibility without the need for costly custom tooling**

Used in automotive comfort, infotainment, body electronics and safety systems, the extended family of Stac64 stackable, unsealed connectors now includes 8,12,16, 20-circuit signal headers as well as 10 and 14-circuit hybrid headers in standard Mylar versions for standard or selective wave soldering. These are available in all 3 USCAR polarization options.

The series 34691 right-angle headers in 8,12,16 and 20 circuit sizes feature a plastic Pin-Alignment-Plate (PAP) which supports high IR-reflow process temperatures of up to 260°C and selective wave soldering. Ganged solutions (series 34997) are available in 2, 3 and 4-bay configurations.

Stac64 connectors can also mate to existing wire-harness connectors designed to USCAR industry footprints.

The Stac64 connector system is validated to USCAR-2 for unsealed applications and meets most stringent specifications from the main automotive OEMs across the globe including PSA, Ford, Nissan, Toyota and VW. A worldwide DVPR with test details can be requested from Molex.

For additional information visit: <http://www.molex.com/link/stac64.html>

## Features and Benefits

|                                                                                                                                                 |                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stackable and modular 2.54mm pitch PCB headers                                                                                                  | Eliminate costly custom tooling, engineering and validation time needed for multi-bay connector configurations                                                                  |
| Selection of 0.64, 1.50 and 2.80mm terminals                                                                                                    | Provide design flexibility; allow circuit size additions for 1 to 4-bay configurations supporting low-level signal requirements and high power requirements of up to 30 Amperes |
| Validated to USCAR Class 2 requirements for unsealed connector applications and meets most stringent specifications from global automotive OEMs | Meets industry-standard footprints suitable for automotive applications                                                                                                         |
| Connector housings all molded to standard USCAR color codes                                                                                     | Support visual polarization as well as assembly of connector systems                                                                                                            |
| Pre-assembled Terminal Position Assurance (TPA) housings shipped as single assembly                                                             | Significantly reduces applied labor and costs needed to seat terminals in connectors during transit and handling                                                                |
| PCB-alignment posts                                                                                                                             | Ensure all terminals are properly aligned into PCB through-holes during assembly. Retain header to PCB during assembly and solder processing                                    |
| PCB stand-offs molded into housings                                                                                                             | Provide additional trace-routing real estate under the headers                                                                                                                  |
| High-temperature thermoplastic housings                                                                                                         | Withstand Infra red (IR) and selective wave lead-free solder processing temperatures according to Molex ES-40000-5013 specifications                                            |
| Right-angle headers with hard plastic Pin-Alignment-Plate (PAP)                                                                                 | Support high IR-reflow temperatures of up to 260°C and selective wave soldering                                                                                                 |

## Stac64™ Connector System Unsealed Headers and Receptacles

### *This Release:*

|                   |                                       |
|-------------------|---------------------------------------|
| <b>34691-6XXX</b> | PAP version Right-Angle Header (Tray) |
| <b>34691-9XXX</b> | PAP version Right-Angle Header (Tube) |
| <b>34997</b>      | PAP version Ganged Header             |

### *Previous Releases: Headers*

|              |                                |
|--------------|--------------------------------|
| <b>34690</b> | Vertical                       |
| <b>34691</b> | Right Angle                    |
| <b>34695</b> | 10-circuit, Hybrid Vertical    |
| <b>34696</b> | 10-circuit, Hybrid Right Angle |
| <b>34772</b> | 14-circuit, Hybrid Vertical    |
| <b>34773</b> | 14-circuit, Hybrid Right-Angle |

### *Ganged Headers*

|              |             |
|--------------|-------------|
| <b>34707</b> | Vertical    |
| <b>34708</b> | Right-Angle |

### *Receptacles*

|              |                           |
|--------------|---------------------------|
| <b>34729</b> | 8-, 12-, 16-, 20 Circuits |
| <b>31372</b> | 10-circuit Hybrid         |
| <b>34969</b> | 14-circuit Hybrid         |

### *Female Terminals*

|              |       |
|--------------|-------|
| <b>34803</b> | CTX64 |
| <b>33012</b> | MX150 |



Stac64™ Connectors showing Ganged Right Angle Headers and a mating Receptacle in 20-circuit configurations

## Specifications

### Reference Information

#### Packaging:

- Female Receptacles – Bulk pack
- Male Vertical/Right-Angle Headers – Tray or Tube
- Terminals – Reel

#### Mates With:

- Series 34729 and 31372 female connectors mate to Series 34690, 34691, 34695, 34696 male unsealed headers
- Series 34969 female connectors mate to series 34773 (R/A) and 34772 (vertical) unsealed headers

#### Use With following terminals:

- 0.64mm female – Molex CTX64 series 34803
- 1.50mm female – Molex Series 33012
- 2.80mm female – Tyco and Yazaki

Designed in: Millimeters

### Electrical

Voltage (max.): 500V DC

Current (max.):

- 2.80mm – 30.0A
- 1.50mm – 20.0A
- 0.64mm – 6.0A

Current is dependent on connector size, ambient temperature, blade size and related factors

Contact Resistance:

- 2.80mm – 5 milliohms max.
- 1.50mm – 10 milliohms max.
- 0.64mm – 20 milliohms max.

Dielectric Withstanding Voltage: 500V DC

Isolation Resistance: 20 Megohms min.

### Mechanical / Electrical

Mating Force: < 75N

Unmating Force: < 60N

Connector Retention (Primary latch): 110N min.

Contact Retention to Housing:

- 2.80mm – 90N min. with TPA; 60N without TPA
- 1.50mm – 85N min. with TPA; 45N without TPA
- 0.64mm – 75N min. with TPA; 30N without TPA

Contact Insertion Force Into Housing: 30N max.

Connector Audible Feedback: 7dB over ambient

Polarization Feature Effectiveness: 20-Circuit: 90N min.

All other circuit sizes: 150N

Durability:

10 milliohms max. – 10 cycles

TPA Insertion Force: 60N max.

TPA Extraction Force: 60N max.

## Stac64™ Connector System Unsealed Headers and Receptacles

### Physical

Harness Housings:

10-Circuit:

- 30% Glass-filled SPS/PA66
- 8-, 12-, 14-, 16-, 20-Circuit: 30% Glass-filled PBT

TPA's:

- 10-Circuit: 15% Glass-filled PBT
- 8-, 12-, 14-, 16-, 20-Circuit: 30% Glass-filled PBT

Header Housings:

30% Glass-filled SPS

Contact:

- 2.80mm blades – C19400 Copper (Cu) Alloy
- 1.50mm blades – C19400 Copper (Cu) Alloy
- 0.64mm pins – C26000 Copper (Cu) Alloy

Plating:

0.64mm signal pins and 1.50mm blades:

- Overplating – Tin (Sn)
- Underplating – Nickel (Ni)
- 1.50mm receptacle terminals: Overplating – Tin (Sn)
- Underplating – Nickel (Ni)

2.80mm blades:

- Overplating – Tin (Sn)
- Underplating – Nickel (Ni)

Operating Temperature:

-40 to +105°C

### Reference Product

#### Specifications for:

Signal: PS-34729-100

Power: PS-31372-100

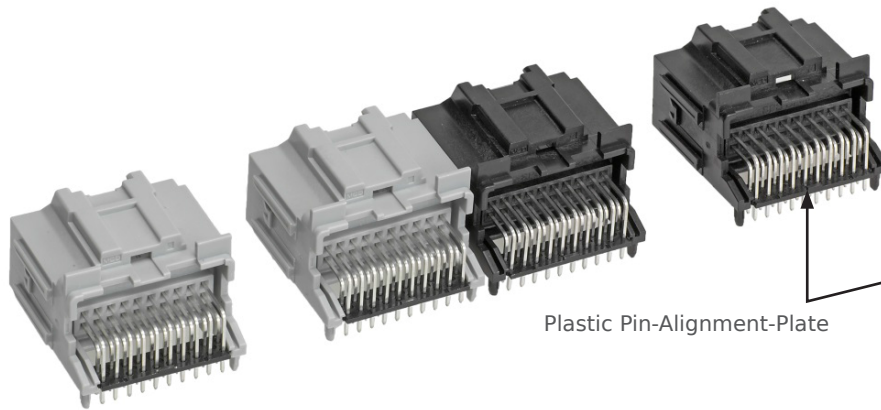
Power (14-circuit): PS-34969-100



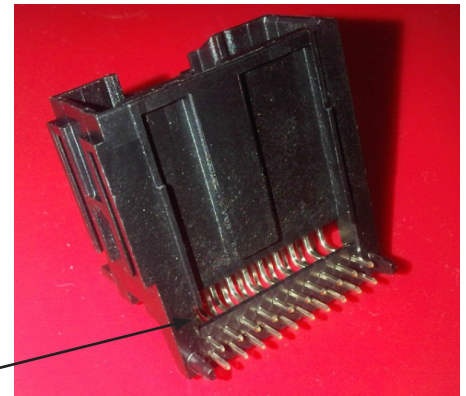
## Stac64™ Connector System Unsealed Headers and Receptacles

### Product Features

New 8,12,16,20 circuit right-angle headers with plastic Pin-Alignment-Plate (PAP)



Plastic Pin-Alignment-Plate



Underside view of header showing Pin-Alignment-Plate

These PAP version headers can work as a standalone (single-bay) solution or a ganged array of up a maximum of 4 bays (by stacking all 4 connectors together laterally)

### Applications

Unsealed applications in:

Automotive vehicles

- In-car entertainment
- Interior lighting and navigation
- Instrument panel clusters
- Power seat modules
- Door zone modules

Commercial vehicles

- Interior electronic modules
- Body electronic modules



Interior Lighting



Navigation Systems



Power Seat Modules



Infotainment Systems

## Ordering Information

### Headers

| *Order No.                        | Circuit Size | Orientation | Hybrid | Packaging | Header Type | **Pin-Alignment-Plate Material | Soldering Process | Mates with Receptacle             |
|-----------------------------------|--------------|-------------|--------|-----------|-------------|--------------------------------|-------------------|-----------------------------------|
| <a href="#"><u>34690-008*</u></a> | 8            | Vertical    | No     | Tray      | Signal      | Mylar                          | Wave Solder       | <a href="#"><u>34729-008*</u></a> |
| <a href="#"><u>34690-908*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34690-012*</u></a> | 12           |             |        | Tray      |             |                                |                   | <a href="#"><u>34729-012*</u></a> |
| <a href="#"><u>34690-912*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34690-016*</u></a> | 16           |             |        | Tray      |             |                                |                   | <a href="#"><u>34729-016*</u></a> |
| <a href="#"><u>34690-916*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34690-020*</u></a> | 20           |             |        | Tray      |             |                                |                   | <a href="#"><u>34729-020*</u></a> |
| <a href="#"><u>34690-920*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34695-010*</u></a> | 10           |             | Yes    | Tray      | Power       |                                |                   | <a href="#"><u>31372-1*00</u></a> |
| <a href="#"><u>34695-910*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34772-014*</u></a> | 14           |             |        | Tray      |             |                                |                   | <a href="#"><u>34969-014*</u></a> |
| <a href="#"><u>34691-008*</u></a> | 8            | Right Angle | No     | Tray      | Signal      |                                |                   | <a href="#"><u>34729-008*</u></a> |
| <a href="#"><u>34691-908*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34691-012*</u></a> | 12           |             |        | Tray      |             |                                |                   | <a href="#"><u>34729-012*</u></a> |
| <a href="#"><u>34691-912*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34691-016*</u></a> | 16           |             |        | Tray      |             |                                |                   | <a href="#"><u>34729-016*</u></a> |
| <a href="#"><u>34691-916*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34691-020*</u></a> | 20           |             |        | Tray      |             |                                |                   | <a href="#"><u>34729-020*</u></a> |
| <a href="#"><u>34691-920*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34696-010*</u></a> | 10           |             | Yes    | Tray      | Power       |                                |                   | <a href="#"><u>31372-1*00</u></a> |
| <a href="#"><u>34696-910*</u></a> |              |             |        | Tube      |             |                                |                   |                                   |
| <a href="#"><u>34773-014*</u></a> | 14           |             |        | Tray      |             |                                |                   | <a href="#"><u>34969-014*</u></a> |

\* Multiple color and polarization options are available on [molex.com](http://molex.com); search Molex website with series number for complete list of order numbers required

### Ordering Information

#### PAP Headers

| Order No.                  | Circuit Size | Polarization | Orientation | Packaging | Pin-Alignment Feature | Header Type | Soldering Process                      | Mates with Receptacle      |
|----------------------------|--------------|--------------|-------------|-----------|-----------------------|-------------|----------------------------------------|----------------------------|
| <a href="#">34691-6080</a> | 8            | A – Black    | Right Angle | Tray      | Plastic PAP           | Signal      | IR-reflow and selective wave soldering | <a href="#">34729-008*</a> |
| <a href="#">34691-6081</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-6082</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-6120</a> | 12           | A – Black    |             |           |                       |             |                                        |                            |
| <a href="#">34691-6121</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-6122</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-6160</a> | 16           | A – Black    |             |           |                       |             |                                        |                            |
| <a href="#">34691-6161</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-6162</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-6200</a> | 20           | A – Black    |             |           |                       |             |                                        |                            |
| <a href="#">34691-6201</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-6202</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-6203</a> |              | D – Green    |             |           |                       |             |                                        |                            |
| <a href="#">34691-9680</a> | 8            | A – Black    |             | Tube      |                       |             |                                        | <a href="#">34729-016*</a> |
| <a href="#">34691-9681</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-9682</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-9623</a> | 12           | A – Black    |             |           |                       |             |                                        |                            |
| <a href="#">34691-9624</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-9625</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-9660</a> | 16           | A – Black    |             |           |                       |             |                                        |                            |
| <a href="#">34691-9661</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-9662</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-9246</a> | 20           | A – Black    |             |           |                       |             |                                        | <a href="#">34729-020*</a> |
| <a href="#">34691-9256</a> |              | B – Grey     |             |           |                       |             |                                        |                            |
| <a href="#">34691-9266</a> |              | C – Brown    |             |           |                       |             |                                        |                            |
| <a href="#">34691-9276</a> |              | D – Green    |             |           |                       |             |                                        |                            |

Note: For Single-Bay PAP Headers – sales is requested to focus on promoting to customers using Reflow Soldering Processes and Selective Wave Soldering

Important: For stacked combinations, a mixture of headers using Mylar for pin-alignment and plastic PAP versions is NOT allowed. Stacked header assemblies must use either ALL Mylar or ALL plastic PAP versions,

For Hybrid headers, no PAP versions are available at the moment. There is an option though: a 10-circuit Hybrid Right Angle header without Mylar can be stacked with a PAP version header.

#### Ganged Headers (Mylar Version)

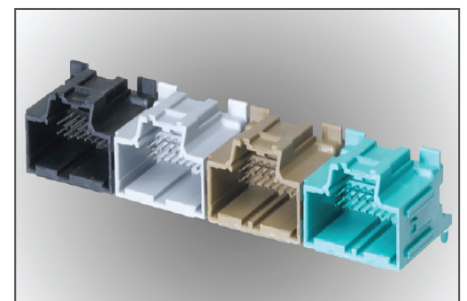
| *Order No.                 | Orientation | Number of Bays | Assembly Features                |
|----------------------------|-------------|----------------|----------------------------------|
| <a href="#">34707-2***</a> | Vertical    | 2              | Housing and Pin Assembly         |
| <a href="#">34707-3***</a> |             | 3              |                                  |
| <a href="#">34707-4***</a> |             | 4              |                                  |
| <a href="#">34708-2***</a> | Right-Angle | 2              | Housing, Pins and Mylar Assembly |
| <a href="#">34708-3***</a> |             | 3              |                                  |
| <a href="#">34708-4***</a> |             | 4              |                                  |

#### Ganged Headers (PAP Version)

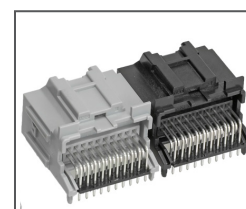
| *Order No.                 | Orientation | Number of Bays | Assembly Features                |
|----------------------------|-------------|----------------|----------------------------------|
| <a href="#">34997-2***</a> | Right-Angle | 2              | Housing, Pins and Mylar Assembly |
| <a href="#">34997-3***</a> |             | 3              |                                  |
| <a href="#">34997-4***</a> |             | 4              |                                  |

\* Multiple color and polarization options are available on [molex.com](http://molex.com); search Molex website with series number for complete list of order numbers required

For custom configurations, please contact your customer service representative



20-circuit, 4-bay Stac64™ ganged headers in black, grey, brown and green polarization options



20-circuit, 2-bay Stac64™ ganged headers in black and grey polarization options

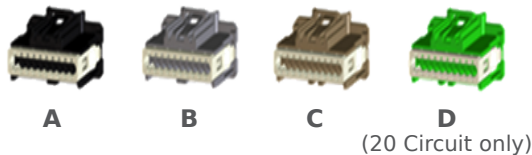
### Ordering Information

#### Receptacles

| Order No.                  | Circuit Size | Connector Type | Terminal loading |        |        |
|----------------------------|--------------|----------------|------------------|--------|--------|
|                            |              |                | 0.64mm           | 1.50mm | 2.80mm |
| <a href="#">34729-008*</a> | 8            | Signal         | 8                | -      | -      |
| <a href="#">34729-012*</a> | 12           |                | 12               |        |        |
| <a href="#">34729-016*</a> | 16           |                | 16               |        |        |
| <a href="#">34729-020*</a> | 20           |                | 20               |        |        |
| <a href="#">31372-1*00</a> | 10           | Power          | -                | 6      | 4      |
| <a href="#">34969-014*</a> | 14           |                | 10               | -      |        |

\* Multiple color and polarization options available; search Molex website with series number to select complete list of order numbers required

#### Polarization Options



#### Legend for Polarization Options:

A= Black  
B= Grey  
C= Brown  
D = Green (20 Circuit only)

#### Female Terminals

| Order No.                  | Terminal Size mm | Terminal Type | Source | Gender | Plating  | Wire Size (AWG) | Use with: Circuits (Molex Series) |
|----------------------------|------------------|---------------|--------|--------|----------|-----------------|-----------------------------------|
| <a href="#">34803-0211</a> | 0.64             | CTX64         | Molex  | Female | Tin (Sn) | 22              | 8, 12, 16, 20 (34729)             |
| <a href="#">34803-0212</a> |                  |               |        |        |          | 20              |                                   |
| <a href="#">33012-2001</a> | 1.50             | MX150         |        |        |          | 14 or 16        | 10, 14 (31372, 34969)             |
| <a href="#">33012-2002</a> |                  |               |        |        |          | 18 or 20        |                                   |
| <a href="#">33012-2003</a> |                  |               |        |        |          | 22              |                                   |
| 1326030-4                  |                  |               |        |        |          | 10 or 12        |                                   |
| 1326030-3                  | 2.80             | -             | Tyco   |        |          | 14 or 16        |                                   |
| 1326030-2                  |                  |               |        |        |          | 18 or 20        |                                   |
| 1326030-1                  |                  |               |        |        |          | 22              |                                   |
| 7116-4112-02               |                  |               | Yazaki |        |          | 14              |                                   |
| 7116-4111-02               |                  |               |        |        |          | 16 or 18        |                                   |
| 7116-4110-02               |                  |               |        |        |          | 20 or 22        |                                   |

For further information on the complete Stac64™ Connector System, please refer to the following Molex literature: Order No. 987654-9041 and 987650-4561

[www.molex.com/link/stac64.html](http://www.molex.com/link/stac64.html)



## О компании

ООО "ТрейдЭлектроникс" - это оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов. Реализуемая нашей компанией продукция насчитывает более полумиллиона наименований.

Благодаря этому наша компания предлагает к поставке практически не ограниченный ассортимент компонентов как оптовыми, мелкооптовыми партиями, так и в розницу.

Наличие собственной эффективной системы логистики обеспечивает надежную поставку продукции по конкурентным ценам в точно указанные сроки.

Срок поставки со стоков в **Европе и Америке – от 3 до 14 дней.**

Срок поставки из **Азии – от 10 дней.**

Благодаря развитой сети поставщиков, помогаем в поиске и приобретении экзотичных или снятых с производства компонентов.

Предоставляем спец цены на элементы для создания инженерных сэмплов.

**Упорный труд, качественный результат дают нам право быть уверенными в себе и надежными для наших клиентов.**

### **Наша компания это:**

- Гарантия качества поставляемой продукции
- Широкий ассортимент
- Минимальные сроки поставок
- Техническая поддержка
- Подбор комплектации
- Индивидуальный подход
- Гибкое ценообразование

Наша организация особенно сильна в поставках модулей, микросхем, пассивных компонентов, ксайленсах (XC), EPF, EPM и силовой электроники.

Большой выбор предлагаемой продукции, различные виды оплаты и доставки, позволят Вам сэкономить время и получить максимум выгоды от сотрудничества с нами!

## Перечень производителей, продукцию которых мы поставляем на российский рынок





Trade Electronics.ru

гарантия бесперебойности производства и  
качества выпускаемой продукции

С удовольствием будем прорабатывать для Вас поставки всех необходимых компонентов по текущим запросам для скорейшего выявления групп элементов, по которым сотрудничество именно с нашей компанией будет для Вас максимально выгодным!

С уважением,

Менеджер отдела продаж ООО

«Трейд Электроникс»

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